

Amendments to the Specification

Please replace paragraph [0026] with the following rewritten paragraph:

[0026] Then, in S3, the master pressure P_m which is the present hydraulic pressure of the master cylinder 22 is detected. As in the case of the pedal stroke ST, the master pressure P_m has already been detected as the detection value obtained by the master pressure sensor 54, and has already been stored in the RAM152. The master pressure P_m is also one type of the operation state amounts of the operating member, and is used as the operating force related amount. The master pressure P_m is a relative pressure with the atmospheric pressure. The master pressure P_m is “0” when the brake pedal 20 is not depressed, and increases with an increase in the depressing amount. In step S4, the master pressure corresponding target vehicle deceleration G_{pm}^* which corresponds to the detected master pressure P_m is read from the P_m - G_{pm}^* map stored in the ROM 154. In the embodiment, in the P_m - G_{pm}^* map, the target vehicle deceleration G_{pm}^* increases substantially linearly with an increase in the master pressure P_m , as shown in Fig. 6.

Please replace paragraph [0027] with the following rewritten paragraph:

[0027] In the embodiment, the target vehicle deceleration G^* is decided as the weighting sum of G_{ST}^* and G_{pm}^* . In S5, the weighting coefficient α ~~which is the coefficient for weighting~~ is read from the weighting coefficient map stored in the ROM 154. As shown in FIG. 7, the weighting coefficient α is related to the master pressure corresponding vehicle target deceleration G_{pm}^* . The value of the weighting coefficient α corresponding to G_{pm}^* read in S4 is read from the weighting coefficient map. In the embodiment, the weighting coefficient α is a value equal to or larger than “0” and also equal to or smaller than “1”, and

the value of the weighting coefficient α increases with an increased in G_{pm}^* . In S6, the target vehicle deceleration G^* is obtained according to the following equation.

$$G^* = \alpha \times G_{pm}^* + (1 - \alpha) \times G_{st}^*$$